

Interactive Learning Media and Students' Learning Motivation in Madrasah Ibtidaiyah: Literature Review

Andre Fikar AlMardhafi

Department of Elementary Madrasah Teacher Education Program, Faculty of Tarbiyah and Education, Universitas Islam Negeri K.H. Abdurrahman Wahid Pekalongan, 51141, Indonesia

Article Info

Keywords:

*Interactive Media
Learning Motivation
Elementary School Education
Educational Technology
Student Engagement*

ABSTRACT

The use of interactive media is replacing traditional teaching techniques at Madrasah Ibtidaiyah (MI) due to advancements in digital technology. Low student motivation remains a significant obstacle to learning. The purpose of this study is to determine which kinds of media are useful and to investigate how interactive media influences MI students' motivation to learn. The strategy is a qualitative literature review that analyses numerous pertinent scientific sources. The study's findings show that interactive media, including educational games, movies, applications, and animations, can boost students' interest, focus, and active participation in their education. Additionally, interactive media increases students' willingness to learn by giving them a more tangible understanding of subjects. As a result, interactive media play a crucial role in developing successful and significant learning experiences in addition to acting as educational tools. This study emphasizes the importance of using interactive technology wisely to enhance instructional quality in elementary schools.

This is an open-access article under the [CC BY-SA](https://creativecommons.org/licenses/by-sa/4.0/) license.



Corresponding Author:

Andre Fikar AlMardhafi

Department of Elementary Madrasah Teacher Education Program, Faculty of Tarbiyah and Education, Universitas Islam Negeri K.H. Abdurrahman Wahid Pekalongan, 51141, Indonesia

Email: andre.fikar.al.mardhafi24007@mhs.uingsdur.ac.id

1. INTRODUCTION

Digital technology advancements have changed several facets of education, including Madrasah Ibtidaiyah (MI) learning methods. In order to fit the developmental features of elementary students that rely on visual, auditory, and experiential learning processes, the incorporation of interactive learning media has become a more popular alternative to traditional lecture-based education [1], [2]. It has been demonstrated that interactive media, including instructional videos, educational applications, and animation-based material, have been associated with an increase in educational activities.

Self-Determination Theory (SDT), which emphasizes autonomy, competence, and relatedness as important elements determining intrinsic motivation, can theoretically explain the connection between interactive media and learning motivation [3], [4]. According to studies, interactive learning environments that offer rapid feedback and active interaction can help meet these psychological needs. Furthermore, well-designed multimedia products may lessen cognitive load and increase learning effectiveness, according to Cognitive Load Theory [5]. Research also shows that when multimedia instruction is planned using cognitive principles, it improves students' comprehension and motivation [6].

Interactive media has been empirically linked to higher levels of student motivation and engagement, according to multiple studies. Digital media, for example, has been shown to have a favorable impact on academic motivation and student engagement [2]. In a similar vein, incorporating interactive and mobile technologies enhances learning motivation and attitudes [7]. However, rather than concentrating on motivation as a multifaceted construct, the majority of current research emphasizes learning outcomes.

The use of interactive technology in Madrasah Ibtidaiyah may be impacted by issues such as inadequate infrastructure, differing degrees of teacher preparedness, and societal variables [8], [9]. Previous research frequently



links repeated teaching techniques to poor student motivation [10], but these explanations tend to oversimplify the problem by ignoring more comprehensive systemic issues, such as institutional support and resource constraints.

There are very few thorough literature evaluations that particularly look at the connection between interactive media and learning motivation in MI contexts, despite the increased interest in educational technology. Previous research has tended to concentrate on learning results or general primary education environments without thoroughly examining motivational aspects [2], [7]. Therefore, in order to comprehend how interactive media connects to students' intrinsic and extrinsic motivation within the particular setting of Madrasah Ibtidaiyah, a more concentrated and theoretically grounded review is required.

The importance of examining interactive learning media in Madrasah Ibtidaiyah (MI) contexts cannot be separated from the growing challenges faced by elementary Islamic education in maintaining students' learning motivation in the digital era. Learning motivation is widely recognized as one of the key determinants of students' academic success because motivated learners tend to show greater participation, persistence, and willingness to engage in classroom activities. In many MI classrooms, however, conventional teacher-centered approaches are still frequently implemented, resulting in passive learning situations that may reduce students' enthusiasm and curiosity during lessons. At the same time, the rapid development of educational technology has created opportunities to design more engaging and student-centered learning environments. Therefore, understanding how interactive media contributes to students' motivation is important for improving the quality of learning in Madrasah Ibtidaiyah.

Several previous studies have discussed the role of technology-based learning media in primary education. Research on multimedia learning emphasizes that visual and interactive elements can help students process information more effectively and improve classroom engagement [1], [3]. Other studies also report that educational games, mobile learning applications, and animation-based media may support active learning and increase students' interest in learning activities [5], [7]. Furthermore, theories such as Self-Determination Theory and Cognitive Load Theory explain that interactive learning environments can encourage motivation by supporting autonomy, competence, and meaningful cognitive processing [2], [4]. These studies indicate that interactive media has considerable potential to create more enjoyable and meaningful learning experiences for elementary school students.

Despite these findings, previous studies still show several limitations. Many existing studies focus mainly on cognitive learning outcomes such as academic achievement and conceptual understanding, while the motivational dimension is often discussed only indirectly. In addition, most research has been conducted in general elementary school settings rather than specifically in Madrasah Ibtidaiyah environments, which have unique educational, cultural, and religious characteristics. As a result, the relationship between interactive media and students' learning motivation in MI contexts remains insufficiently explored. The lack of context-specific discussions creates a research gap that needs further investigation, particularly through a literature review that synthesizes findings from various relevant studies.

Another limitation in previous studies is the inconsistency in defining and measuring learning motivation. Some studies interpret motivation merely as students' classroom participation, while others associate it with emotional engagement, enjoyment, or academic persistence. Differences in research methods, media types, and assessment instruments also make it difficult to compare findings systematically. Moreover, earlier studies frequently present interactive media as universally effective without sufficiently considering contextual challenges such as infrastructure limitations, unequal access to digital technology, and variations in teachers' technological competence. These limitations suggest the need for a more critical and comprehensive review regarding the implementation of interactive media in MI learning environments.

From a practical perspective, problems related to low student motivation remain important issues in Madrasah Ibtidaiyah learning processes. Students often experience boredom during lessons dominated by lectures and textbook-oriented instruction. In some schools, teachers also face difficulties in integrating digital technology into classroom activities because of limited training opportunities and inadequate educational facilities. Consequently, interactive learning media is not always implemented optimally, even though it has the potential to create more engaging instructional experiences. Addressing these practical challenges is essential because improving students' motivation is closely related to improving overall educational quality and learning effectiveness in elementary Islamic schools.

Based on these considerations, this study aims to review and analyze previous literature concerning the relationship between interactive learning media and students' learning motivation in Madrasah Ibtidaiyah. Specifically, this study seeks to identify the types of interactive media commonly used in MI learning contexts, examine their potential influence on students' motivation, and critically evaluate the contextual factors affecting their implementation. Through this literature review, the study is expected to provide a more comprehensive understanding of how interactive learning media can support meaningful and motivating learning experiences in Madrasah Ibtidaiyah settings.

2. METHOD

In the context of Madrasah Ibtidaiyah (MI), this study uses a systematic literature review technique to investigate the connection between interactive learning materials and students' willingness to learn. This method was used because the goal of the study is not to provide primary empirical data, but rather to integrate and critically assess findings from

recent and prior research. An appropriate research strategy for locating, assessing, and summarizing current knowledge in an organized way is a literature review [11]. To promote transparency and scientific rigor, the review process was carried out methodically by modifying general literature review processes, such as identification, screening, eligibility assessment, and inclusion of pertinent research [12], [13].

In order to ensure that the analysis reflects a thorough understanding based on previous and current research findings, the literature was gathered from a variety of academic sources, including credible national and international scientific publications. Only peer-reviewed journal publications addressing interactive learning media and learning motivation in primary education contexts were included in the selection of literature, which was guided by predetermined inclusion and exclusion criteria. In the meantime, articles that lacked full-text access or were not directly related to the research topic were eliminated, as were non-academic sources and duplicate studies. The quality and applicability of the synthesized evidence depend on this selection procedure [14], [15].

A thematic analysis strategy, which enables researchers to methodically find, examine, and describe patterns within the data, was used to evaluate the data [16]. In order to classify data pertaining to interactive media kinds and learning motivation factors, including intrinsic and extrinsic features, the analysis procedure first involved gathering important information from chosen studies. In order to find trends, connections, and differences between research, these codes were then grouped into more general themes. This allowed for a more critical and thorough synthesis as opposed to a strictly descriptive overview.

Additionally, a quality review was carried out to guarantee the validity of the chosen literature by assessing each study's relevance to the research focus, methodological rigor, and clarity of research aims. To guarantee that only trustworthy and legitimate papers are included in the analysis, quality assessment is a crucial stage in systematic reviews [17], [18]. A documentation strategy was used in the data collection process, which included locating, categorizing, and arranging pertinent scientific publications. In accordance with suggested strategies for carrying out thorough literature reviews, the validity and reliability of the results were preserved by methodical selection processes, clear criteria, and careful comparison of findings across several research studies [19]. By using this method, the study offers a scientifically supported investigation of the relationship between interactive learning media and Madrasah Ibtidaiyah students' enthusiasm to learn.

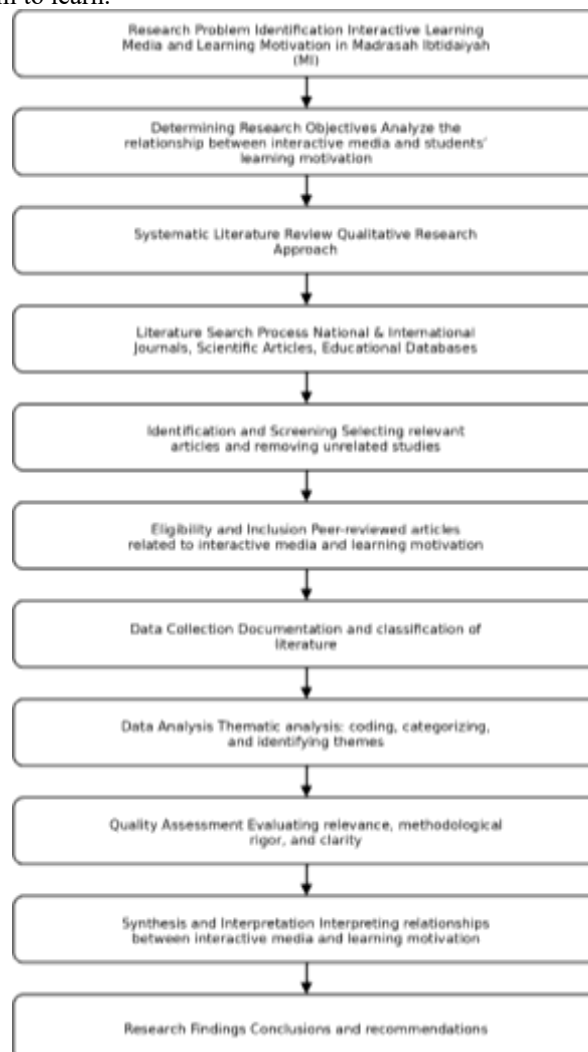


Figure 1. Research Method Flowchart

3. RESULTS

3.1. Thematic Findings on Interactive Media and Learning Motivation

The results of this literature review show that, rather than being consistently favorable, the relationship between interactive learning materials and students' motivation to learn at Madrasah Ibtidaiyah (MI) is multifaceted and context-dependent. Three primary topics emerged from the thematic analysis:

- (1) conceptual understanding;
- (2) learning experience and enjoyment; and
- (3) student participation and attention.

First, a number of studies indicate that interactive media is linked to higher levels of student involvement and attention during the learning process. For example, [20] notes that visual and participation elements in digital interactive environments can improve students' behavioral engagement. However, as engagement may be transient and impacted by novelty effects, this increase in attention does not always result in long-term motivation. According to other research, interactive media may not be able to sustain long-term motivational benefits without proper instructional design [21].

Second, students' motivation to participate in class activities may be influenced by interactive technology, which is often linked to more pleasurable and significant learning experiences. Digital learning environments can encourage favorable emotional reactions that boost motivation, according to [22]. In a similar vein, [23] discovered that when learning events incorporate interactive and student-centered techniques, children typically exhibit higher levels of participation. However, several studies emphasize that without teacher assistance and pedagogical alignment, technology integration alone is insufficient; these results are not constant across all circumstances.

Third, research indicates that interactive media's simulation and visualization elements may help pupils grasp concepts, according to Ref. [24]. Multimedia components can improve learners' ability to digest difficult information, which may indirectly boost motivation by raising perceived competence. Nonetheless, a number of studies highlight that a lot of research focuses more on cognitive outcomes than on assessing motivational characteristics directly, which makes it difficult to evaluate the connection between media consumption and motivation [25].

Overall, despite the fact that numerous studies show a favorable correlation between interactive media and elements of learning motivation, the results are still inconsistent. Inconsistencies in reported results can be caused by variations in research design, sample characteristics, media kinds, and measurement tools. Additionally, only a small number of studies offer comprehensive empirical measures of motivation, which limits the capacity to make generalizations.

3.2. Types of Interactive Media and Their Associated Outcomes

Additionally, the investigation found a number of interactive media formats that are frequently utilized in primary school settings, such as educational games, educational applications, interactive movies, and animation-based media. Different traits and possible contributions to learning motivation are displayed by each kind.

Because of its audiovisual presentation, interactive video is frequently linked to higher student attentiveness. Multimedia video can help capture attention and early engagement, according to Ref. [26], but its effectiveness depends on the degree of participation because passive viewing may diminish the motivational influence.

Quizzes, feedback systems, and adaptive features are examples of educational applications that are linked to higher levels of student autonomy and participation. These apps can promote active learning practices, but their efficacy differs based on user experience and accessibility, according to [27]. Media with animation is frequently utilized to enhance mental comprehension, especially when it comes to abstract content, according to Ref. [28]. Animation can enhance comprehension and explain difficult ideas. However, the relationship between motivation and better comprehension is frequently indirect and mediated by cognitive variables.

Increased excitement and participation in learning are often associated with educational games. However, other research warns that if excessive gaming features are not appropriately matched with instructional aims, they may divert students from learning objectives [29].

Table 1. Synthesis of Interactive Media Types and Associated Motivational Dimensions

No	Type of Interactive Media	Main Characteristics	Associated Outcomes	Notes on Limitations
1	Interactive Video	Audiovisual content	Increased attention and engagement	Limited if passive
2	Educational Apps	Feedback, interactivity	Supports participation and autonomy	Depends on usability
3	Animation Media	Visual explanation	Improves understanding	Indirect effect on motivation
4	Educational Games	Game-based learning	Increases enthusiasm	Risk of distraction



The findings show that interactive media is linked to several aspects of students' motivation to learn, namely engagement, enjoyment, and perceived comprehension. However, the link is impacted by a number of pedagogical and contextual factors and is not causative. The results also show that different studies have different definitions and measurements of motivation, which highlights the need for more thorough and situation-specific research, particularly in Madrasah Ibtidaiyah settings.

3.3. DISCUSSION

The findings of this study show that interactive learning materials are linked to a number of aspects of students' motivation to learn, including engagement, enjoyment, and perceived comprehension. However, the findings indicate that instructional design, teacher facilitation, and contextual factors within Madrasah Ibtidaiyah (MI) mitigate the impact of interactive media rather than proving a direct causative relationship. This conclusion is consistent with earlier research highlighting that the pedagogical integration of educational technology, rather than the technology itself, determines its efficacy [30].

From a theoretical standpoint, these results can be explained by Self-Determination Theory (SDT), which holds that the satisfaction of relatedness, competence, and autonomy influences motivation. Students' perception of competence and independence may be enhanced by interactive media that include active learning elements and feedback mechanisms. For example, [31] emphasizes how interactive and adaptable learning environments can boost students' intrinsic motivation. However, not all interactive media implementations produce these results because badly built systems may result in surface participation or disengagement rather than meaningful learning.

Additionally, Cognitive Load Theory, which describes how multimedia components affect learning processes, might be used to understand the findings. When intended to reduce unnecessary cognitive strain, visual and interactive representations can aid comprehension. Well-structured multimedia can increase learning effectiveness, while excessive or disorganized media components may overwhelm students and lower their enthusiasm, according to [32]. This implies that learners' cognitive experiences act as a mediator in the indirect relationship between understanding and motivation.

Crucially, the results also show discrepancies among the examined research. While much research shows that interactive media and student engagement are positively correlated, some speculate that these effects might be transient or contingent on contextual circumstances. For instance, [33] points out that while digital media's initial appeal may result in brief engagement, meaningful instructional design and active instructor involvement are necessary for long-term motivation. These differences show that interactive media's effects are not consistent and should be interpreted cautiously.

The impact of contextual restrictions is another important factor, especially in MI situations. The use of interactive media can be greatly impacted by elements including unequal access to learning devices, disparities in teachers' technological proficiency, and restricted access to digital infrastructure. The usefulness of digital learning innovations may be limited by differences in technology resources, particularly in educational settings with limited resources, according to research by [34]. These difficulties could include erratic internet access, a lack of digital equipment, and inadequate teacher training in the context of Madrasah Ibtidaiyah, all of which have an impact on the practical application of interactive media.

Additionally, a number of methodological limitations are acknowledged in this work. The scope and caliber of the chosen studies determine the conclusions of a literature review. Inconsistencies in the results are caused by differences in research design, assessment tools, and definitions of motivation among studies. Furthermore, it can be challenging to draw precise comparisons because some studies do not specifically evaluate motivation as a major variable. The absence of common frameworks in educational technology research can make it more difficult to synthesize findings across many contexts, as [35] points out.

Practically speaking, this study indicates that interactive media should be seen as a supplementary tool rather than a stand-alone way to increase learning motivation. Contextual factors, teacher preparation, and alignment with educational practices are necessary for effective implementation. In order to ensure that technology use enhances rather than detracts from learning objectives, teachers are essential in fostering meaningful connections between students and educational media. Therefore, developing instructional design and teacher competency is just as important to increasing student motivation as integrating digital resources. Overall, by highlighting the fact that interactive media's influence is conditional, context-dependent, and mediated by a variety of factors, this study offers a more comprehensive understanding of the relationship between interactive media and learning motivation.

4. CONCLUSION

According to the study's findings, interactive learning materials are linked to a number of features of Madrasah Ibtidaiyah (MI) students' motivation to learn, especially when it comes to engagement, learning experience, and perceived understanding. This study emphasizes that interactive media can enhance learning processes when they are well integrated with instructional methodologies and matched with students' requirements, rather than proving a causal relationship. According to the reviewed research, a variety of interactive media, including educational applications, films, animations, and game-based learning, may help provide more interesting and significant learning opportunities.

The results, however, also show that the relationship between interactive media and learning motivation is not consistent and is impacted by a variety of contextual circumstances. These include the availability of supporting infrastructure, teachers' pedagogical and technological proficiencies, and students' access to technology. Such variables may restrict the potential impact of interactive media on student motivation in Madrasah Ibtidaiyah, particularly in settings with minimal resources.

A number of shortcomings are also acknowledged in this study. The scope and caliber of the chosen studies, which differ in terms of research design, environment, and motivation measurement, determine the conclusions of a literature review. Additionally, it is challenging to compare findings methodically due to the absence of consistent definitions and assessment instruments for learning motivation across studies. As a result, a narrative synthesis should be used to interpret the study's findings. Practically speaking, this study recommends using interactive media as a supplementary aid rather than a stand-alone remedy.

Strengthening teacher capacity, creating context-appropriate learning strategies, and guaranteeing equitable access to learning resources should all be part of efforts to increase student motivation because teachers are crucial in ensuring that the use of interactive media supports learning objectives.

More context-specific and methodologically sound research is required in the future to fully comprehend the relationship between interactive media and learning motivation in Madrasah Ibtidaiyah. Future research might specifically concentrate on creating more precise conceptual frameworks of motivation, using standardized measuring techniques, and investigating how contextual elements like student diversity, teacher preparedness, and infrastructure affect the efficacy of interactive media. It is anticipated that these approaches will offer more practical and grounded insights for enhancing teaching methods in MI environments.

ACKNOWLEDGEMENTS

The author would like to express gratitude to everyone who helped with this study, whether directly or indirectly. The author would especially like to thank family and coworkers for their encouragement and support during the writing process, as well as the academic adviser for the direction and oversight. It is envisaged that this study will further educational science, especially in the area of Madrasah Ibtidaiyah education.

REFERENCES

- [1] R. E. Mayer *et al.*, "Multimedia Learning," *Educ. Technol. Soc.*, vol. 7, no. 2, pp. 37–76, 2011.
- [2] R. M. Ryan and E. L. Deci, "Intrinsic and extrinsic motivation from a self-determination theory perspective," *Contemp. Educ. Psychol.*, vol. 61, p. 101860, 2020.
- [3] R. E. Mayer, *Multimedia Learning*. Cambridge University Press, 2009.
- [4] J. Sweller, "Cognitive load theory," *Psychol. Learn. Motiv.*, vol. 55, pp. 37–76, 2011.
- [5] L. A. Schindler, G. J. Burkholder, O. A. Morad, and C. Marsh, "Computer-based technology and student engagement: A critical review," *Int. J. Educ. Technol. High. Educ.*, vol. 14, no. 1, pp. 1–28, 2017.
- [6] R. E. Mayer, "Multimedia learning and games," 2011.
- [7] Y. T. Sung, K. E. Chang, and T. C. Liu, "The effects of integrating mobile devices with teaching and learning on students' learning performance," *Comput. Educ.*, vol. 94, pp. 252–275, 2016.
- [8] A. M. Sardiman, *Interaksi dan Motivasi Belajar Mengajar*. Raja Grafindo Persada, 2018.
- [9] R. W. Hefner, *Making Modern Muslims: The Politics of Islamic Education in Southeast Asia*. University of Hawai'i Press, 2011.
- [10] Z. M. A. Al-Mubasher, "The Challenges Faced by Primary School Students in Jordan in Learning Islamic Education Online," *Int. J. Health Sci. (Qassim)*, vol. 6, no. S6, pp. 8700–8712, 2022.
- [11] H. Snyder, "Literature review as a research methodology: An overview and guidelines," *J. Bus. Res.*, vol. 104, pp. 333–339, 2019.
- [12] M. J. Page *et al.*, "The PRISMA 2020 statement: an updated guideline for reporting systematic reviews," *BMJ*, vol. 372, 2021.
- [13] D. Papaioannou, A. Sutton, and A. Booth, "Systematic approaches to a successful literature review," *Syst. Approaches to a Successful Lit. Rev.*, pp. 1–336, 2016.
- [14] P. Cronin, F. Ryan, and M. Coughlan, "Undertaking a literature review: a step-by-step approach," *Br. J. Nurs.*, vol. 17, no. 1, pp. 38–43, 2008.
- [15] J. Jesson, F. M. Lacey, and L. Matheson, "Doing your literature review: Traditional and systematic techniques," 2011.
- [16] V. Braun and V. Clarke, "Using thematic analysis in psychology," *Qual. Res. Psychol.*, vol. 3, no. 2, pp. 77–101, 2006.
- [17] Z. Munn, C. Stern, E. Aromataris, C. Lockwood, and Z. Jordan, "What kind of systematic review should I conduct? A proposed typology and guidance for systematic reviewers in the medical and health sciences," *BMC Med. Res. Methodol.*, vol. 18, no. 1, p. 5, 2018.
- [18] D. Tranfield, D. Denyer, and P. Smart, "Towards a methodology for developing evidence-informed management knowledge by means of systematic review," *Br. J. Manag.*, vol. 14, no. 3, pp. 207–222, 2003.



- [19] M. J. Grant and A. Booth, "A typology of reviews: an analysis of 14 review types and associated methodologies," *Heal. Inf. Libr. J.*, vol. 26, no. 2, pp. 91–108, 2009.
- [20] P. J. Wiseman, G. E. Kennedy, and J. M. Lodge, "Models for understanding student engagement in digital learning environments," *Proc. Ascilite 2016, Show Me Learn. Adelaide, November. 27*, vol. 30, 2016.
- [21] N. Selwyn, *Education and technology: Key issues and debates*. Bloomsbury Publishing, 2021.
- [22] J. L. Plass, B. D. Homer, and C. K. Kinzer, "Foundations of game-based learning," *Educ. Psychol.*, vol. 50, no. 4, pp. 258–283, 2015.
- [23] S. D. Brookfield, *The skillful teacher: On technique, trust, and responsiveness in the classroom*. John Wiley & Sons, 2015.
- [24] R. Moreno and R. Mayer, "Interactive multimodal learning environments: Special issue on interactive learning environments: Contemporary issues and trends," *Educ. Psychol. Rev.*, vol. 19, no. 3, pp. 309–326, 2007.
- [25] D. H. Schunk, "Learning Theories: An Educational Perspective," 2012.
- [26] R. H. Kay, "Exploring the use of video podcasts in education: A comprehensive review of the literature," *Comput. Human Behav.*, vol. 28, no. 3, pp. 820–831, 2012.
- [27] M. Ally, *Mobile learning: Transforming the delivery of education and training*. Athabasca University Press, 2009.
- [28] W. Schnotz and M. Bannert, "Construction and interference in learning from multiple representations," *Learn. Instr.*, vol. 13, no. 2, pp. 141–156, 2003.
- [29] R. E. Clark, *Learning from media: Arguments, analysis, and evidence*. IAP, 2001.
- [30] T. C. Reeves and J. G. Hedberg, *Interactive learning systems evaluation*. Educational Technology, 2003.
- [31] J. Bishop and M. A. Verleger, "The flipped classroom: A survey of the research," in *2013 ASEE annual conference & exposition*, 2013, pp. 23–1200.
- [32] F. Paas and J. Sweller, "An evolutionary upgrade of cognitive load theory: Using the human motor system and collaboration to support the learning of complex cognitive tasks," *Educ. Psychol. Rev.*, vol. 24, no. 1, pp. 27–45, 2012.
- [33] S. De Freitas and M. Oliver, "Does E-learning Policy Drive Change in Higher Education?: A case study relating models of organizational change to e-learning implementation," *J. High. Educ. Policy Manag.*, vol. 27, no. 1, pp. 81–96, 2005.
- [34] M. Warschauer, *Technology and social inclusion: Rethinking the digital divide*. MIT Press, 2004.
- [35] R. K. Sawyer, *The Cambridge handbook of the learning sciences*. Cambridge University Press, 2005.